

# Prof. Dr. Amal Mahmoud Mamdouh Abd El-Hamid Youssef



## CURRENT POSITION

Professor, Department of Pharmaceutical Chemistry,  
Faculty of Pharmacy, Alexandria University, Egypt.

## PERSONAL DATA

Nationality: Egyptian.

Marital status: Married.

Languages: Arabic and English.

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[ayoussef65@yahoo.com](mailto:ayoussef65@yahoo.com)

## EDUCATION

- B.S., Pharmaceutical Sciences (Distinction Honor), Alexandria University, Alexandria, Egypt, 1987.
- M.S., Pharmaceutical Chemistry, Alexandria University, Alexandria, Egypt, 1993.
- **Ph.D., Medicinal Chemistry, Virginia Commonwealth University, Richmond, Virginia, USA, 2001.**
- Postdoctoral with Prof. Donald Abraham (editor for the 6<sup>th</sup> edition of Burger's Medicinal Chemistry), Virginia Commonwealth University, 2001.
- Visiting Professor, University of Winnipeg, Winnipeg, Manitoba, Canada, 2005.
- Visiting Professor, University of British Columbia (Okanagan), British Columbia, Canada, 2008, 2009.

## EMPLOYMENT HISTORY

Professor

2012-2019

College of Pharmacy, Al Ain University of Science and Technology, Al Ain, United Arab Emirates

Associate Professor

2007-2012

Department of Pharmaceutical Chemistry, Alexandria University, Alexandria, Egypt.

Assistant Professor

2001-2007

Department of Pharmaceutical Chemistry, Alexandria University, Alexandria, Egypt.

Tutor

1997-2001

Department of Medicinal Chemistry, and Institute for Structural Biology and Drug Discovery, Virginia Commonwealth University, VA, USA.

Assistant Lecturer

1993-1996

Department of Pharmaceutical Chemistry, Alexandria University, Alexandria, Egypt.

Demonstrator

1987-1992

Department of Pharmaceutical Chemistry, Alexandria University, Alexandria, Egypt.

## **RESEARCH INTERESTS**

Doctor of Philosophy in Medicinal Chemistry, with a concentration in Computer-Aided Drug Design and Molecular Modeling. Synthesis and characterization of heterocyclic compounds of biological significance in the fields of anticancer, antiviral, antimicrobial, antiangiogenesis, anti-inflammatory and neuroprotective activities. Structure based drug design including X-ray crystallography, molecular modeling and synthetic medicinal chemistry.

## **TEACHING COURSES**

Medicinal Chemistry, Computer-aided Drug Design and Molecular Modeling.

## **MEMBERSHIPS**

Member of the Egyptian Syndicate of Pharmacists. Member of the Syndicate of Pharmacists in Alexandria. Member of the Egyptian Pharmaceutical Association. Member of the American Chemical Society. Member of Virginia Section of the American Chemical Society.

## **HONORS AND AWARDS**

Scientific Encouragement Prize of Alexandria University 2010.

Egyptian Scholarship in Pharmaceutical Sciences 1996.

Ideal Student 1985, and 1987.

Biography Enlisted in: *The Marquis Who's Who in the World* .  
named a 2019 Lifetime Achievement Award recipient

## **PROFESSIONAL ACTIVITY**

Editorial board member: Open Access Journal of Pharmaceutical Research

Regular reviewer in the following international journals:

European Journal of Medicinal Chemistry

Letters in Drug Design and Discovery (LDDD)

Medicinal Chemistry Research

Bioorganic Chemistry

Medicinal Chemistry

Evaluation of STDF projects submitted to the science and technology development fund.

A member in reviewing Alexandria journal of pharmaceutical sciences.

## SELECTED PUBLICATIONS

- Noor Atatreh, **Amal M. Youssef**, Mohammad A. Ghattas, Mohammad Al Sorkhy, Sara Alrawashdeh, Khaled B. Al-Harbi, Ibrahim M. El-Ashmawy, Tariq I. Almundarij, Amani A. Abdelghani, Alaa S. Abd-El-Aziz (2019), Anti-inflammatory drug approach: Synthesis and biological evaluation of novel pyrazolo[3,4-d]pyrimidine compounds. *Bioorg. Chem.* 86: 393-400.
- Ahmed Malki, Rasha Y. Elbayaa, Omnia Ali, Ahmed Sultan, **Amal M. Youssef** (2017), *Novel quinuclidinone derivatives induced apoptosis in human breast cancer via targeting p53. Bioorg. Chem.* 72: 57-63.
- Ahmed Malki, Rasha Y. Elbayaa, Hayam M.A. Ashour, Christopher A. Loffredo, **Amal M. Youssef** (2015), Novel thiosemicarbazides induced apoptosis in human MCF-7 breast cancer cells via JNK signaling. *J. Enzyme Inhib Med. Chem.*, 30 (5):786-795.
- Perihan A. Elzahhara, Raafat Soliman, Soad A. El-Hawash, Hanan M. Ragab, **Amal M. Youssef**, Abeer E. Wahab (2015), Design, Synthesis and Antimicrobial Evaluation of Methyl Pyridyl-2,4- Dioxobutanoates and Some New Derived Ring Systems. *Med. Chem.* 11 (4): 407-414.
- Soad A.M .El-Hawash, Raafat Soliman, **Amal M. Youssef**, Hanan M.A .Ragab, Perihan A.S. Elzahhara, Ibrahim M. El-Ashmawey, Abeer E. Abdel Wahab, Iman A. Shaat (2014), Design, Synthesis and Biological Screening of Some Pyridinylpyrazole and Pyridinylisoxazole Derivatives as Potential Anti-inflammatory, Analgesic, Antipyretic and Antimicrobial Agents. *Med. Chem.* 10 (3): 318-338.
- Georgina N. Masoud, **Amal M. Youssef**, Magdy M. Abdel Khalek , Abeer E. Abdel Wahab, Ibrahim, M. Labouta and Aly A. B. Hazzaa (2013), Design, Synthesis, and Biological Evaluation of New 4-Thiazolidinone Derivatives Substituted with Benzimidazole Ring as Potential Chemotherapeutic Agents. *Med. Chem. Res.* 22 (2): 707-725.
- **Amal M. Youssef**, Ahmed Malki, Mona H. Badr, Rasha Y. Elbayaa and Ahmed S. Sultan (2012), Synthesis and Anticancer Activity of Novel Benzimidazole and Benzothiazole Derivatives against HepG2 Liver Cancer Cells. *Med. Chem.*, 8 (2): 151-162.
- Samia M. Rida, **Amal M. Youssef**, Mona H. Badr, Ahmed Malki, , Zaki A. Sherif and Ahmed S. Sultan (2012), Design, Synthesis and Evaluation of Novel Benzimidazoles, Benzothiazoles and Benzofurans Incorporating Pyrazole Moiety as Antiangiogenic Agents. *Arzneimittelforschung (Drug Research)*, 62: 63–74.
- Sadayuki Hashioka, James G. McLarnon, Jae K. Ryu, **Amal M. Youssef**, Alaa S. Abd-El-Aziz, Edward G. Neeland and Andis Klegeris (2011), Pyrazole Compound 2-MBAPA as a Novel Inhibitor of Microglial

Activation and Neurotoxicity *in vitro* and *in vivo*. *J. Alzheimer's Dis.* , 27: 531–541.

- Ahmed Malki and **Amal M. Youssef** (2011), Antidiabetic Drug Metformin Induces Apoptosis in Human MCF Breast Cancer via Targeting ERK Signaling. *Oncol. Res.*, 19(6): 275–285.
- **Amal M. Youssef**, Edward G. Neeland, Erika B. Villanueva, M. Sydney White, Ibrahim M. El-Ashmawy, Brian Patrick, Andis Klegeris and Alaa S. Abd-El-Aziz (2010), Synthesis and Biological Evaluation of Novel Pyrazole Compounds. *Bioorg. Med. Chem.*, 18 (15): 5685-5696.
- **Amal M. Youssef**, M. Sydney White, Erika B. Villanueva, Ibrahim M. El-Ashmawy and Andis Klegeris (2010), Synthesis and Evaluation of Novel Pyrazolyl-2,4-thiazolidiniones as Anti-inflammatory and Neuroprotective Agents. *Bioorg. Med. Chem.*, 18 (5): 2019-2028.
- Samia M. Rida, Manal N. S. Saudi, **Amal M. Youssef** and Madiha A. Halim (2009), Synthesis and Biological Evaluation of the Pyrazole Class of Cyclooxygenase-2-Inhibitors. *Lett. Org. Chem.*, 6 (4): 282-288.
- Manal N. S. Saudi, **Amal M. Youssef** Mona, H. Badr, Rasha Y. Elbayaa, Mervat Z. El-azzouni, Sherine F. Mossallam, Nahed M. Baddour, and Maha M. Eissa (2009), Synthesis of Substituted Pyrimidinedione Derivatives as Potential Schistosomicidal Agents. *Lett. Drug Des. Discov.*, 6: 268-277.
- **Amal M. Youssef** and Eman Noaman (2007), Synthesis and Evaluation of Some Novel Benzothiazole Derivatives as Potential Anticancer and Antimicrobial Agents. *Arzneimittel-Forschung (Drug Research)* 57: 547-553.
- **Amal M. Youssef** , Citalin Czezowski, Hany M. Mohamed, Athar Ata, Alaa S. Abd-El-Aziz (2006), Synthesis and Biological Evaluation of Benzothiazole Derivatives of Pyrimidines Acrylonitriles, and Coumarins. *Heterocycles*, 6: 347-355.
- **Amal M. Youssef**, Martin K. Safo, Richmond Danso-Danquah, Gajanan S. Joshi, Jean Kister, Micheal C. Marden, Donald J. Abraham (2002), Synthesis and X-ray studies of Chiral Allosteric Modifiers of Hemoglobin. *J. Med. Chem.*, 45: 1184-1195.

## CULTURAL ACTIVITY

Member of research, postgraduate, scientific conferences and workshops committee, Al Ain University of Science and Technology, Al Ain, United Arab Emirates. 2012-2019

Member of university seminars and conferences committee, Al Ain University of Science and Technology, Al Ain, United Arab Emirates. 2013

Head of transfer committee, Al Ain University of Science and Technology, Al Ain, United Arab Emirates. 2013, 2014

Member of curriculum committee, Al Ain University of Science and Technology, Al Ain, United Arab Emirates. 2015, 2016

Member of library and reading resources committee, Al Ain University of Science and Technology, Al Ain, United Arab Emirates. 2012-2014

Member of quality assurance committee, Al Ain University of Science and Technology, Al Ain, United Arab Emirates. 2013, 2014, 2019

Member of cultural committee, Department of pharmaceutical chemistry, Faculty of Pharmacy, University of Alexandria, Egypt. 2008-2012

Cultural committee consultant for the student union 2008 and 2009, Faculty of Pharmacy, University of Alexandria, Egypt.

### **ADDITIONAL ACTIVITIES**

Participation in the college preparation for self-study submitted to Commission for Academic Accreditation (CAA) for renewal of accreditation of BSc. Pharm. Program, Al Ain University of Science and Technology, Al Ain, United Arab Emirates. 2013-2019

Participation in the college preparation for Accreditation Council for Pharmacy Education (ACPE) certification, Al Ain University of Science and Technology, Al Ain, United Arab Emirates. 2013-2019

Member in the committee for following up cleaning of the internal environment, Faculty of Pharmacy, University of Alexandria, Egypt. 2006-2012

Member in the committee for participating in the project of a university without smoking, Faculty of Pharmacy, University of Alexandria, Egypt. 2006-2012

Member of continuous improvement and quality assurance for accreditation project (CIQAP), Faculty of Pharmacy, University of Alexandria, Egypt. 2006-2012

Member of Quality Assurance Unit (QAU), Faculty of Pharmacy, University of Alexandria, Egypt. 2006-2012

Member of Committee of Instruments, Faculty of Pharmacy, University of Alexandria, Egypt. 2006-2012

### **CONFERENCES AND WOKSHOPS**

"Workshop on Taking your Experiential Education Program to the Next Level" Al Ain University of Science and Technology Abu Dhabi, United Arab Emirates, 3-5 March, 2019.

The Third Regional Faculty Development Workshop on "Best Practices for Planning and evaluation of Experiential Education" held at AAU Abu Dhabi campus, United Arab Emirates, March 4-5, 2018.

The Second Regional Faculty Development Workshop on "Best Practices for Planning Educational Assessment and Curriculum Mapping" held at AAU Abu Dhabi campus, United Arab Emirates, March 5 - 6, 2017.

Workshop entitled "ACHC pharmacy accreditation process and standards" held at AAU, United Arab Emirates on 23 February 2017.

30<sup>th</sup> Business and Economics Society Conference held at Abu Dhabi campus, United Arab Emirates on 8-11 January 2017.

Workshop for professional continuous development entitled "Design, Develop and Measuring Learning Outcomes based on CAA and align with the Qualifications Framework for the Emirates (QFEmirates)", Al Ain, United Arab Emirates on 17 /11/2016.

"Workshop on Curricular Design and Delivery" Al Ain University of Science and Technology  
Abu Dhabi, United Arab Emirates, 13-14 March, 2016.

"Molecular Docking, Virtual Screening and Biologics Discovery" College of Pharmacy, Al Ain University of Science and Technology, Al Ain, United Arab Emirates, 6-7 March, 2016.

"Lecture on Curricular Updates for Pharmacy Education" College of Pharmacy, Al Ain University of Science and Technology, Al Ain, United Arab Emirates, 20 December, 2015.

"Quality and Accreditation the Present and Prospective" The First International Conference of the Quality Assurance and Accreditation center, Cairo University, 15 April, 2008.

## **PRESENTATIONS**

*Youssef, A. M., Malki, A.* Synthesis and Anticancer Activity of Novel Quinuclidinone Derivatives against Breast Cancer Cells Presented at DUPHAT 2013, Dubai, UAE, March 10-12, 2013.

*Youssef, A. M., Malki, A., Badr, M. H., Elbayaa, R. Y., and Sultan, A. S.* Synthesis and Anticancer Activity of Novel Benzimidazole and Benzothiazole Derivatives against HepG2 Liver Cancer Cells. Presented at 3<sup>rd</sup> EPS Global International Forum of Regional and Targeted Cancer Therapies (RTCT) Shanghai, China, October 28-30, 2011.

*Youssef, A. M., White, M.S., Villanueva, E.B., El-Ashmawy I.M., and Klegeris, A.* Neuroprotective and Anti-inflammatory Properties of Novel Pyrazolyl-2,4-thiazolidinediones. Presented at The XVIII WFN World Congress on Parkinson's Disease and Related Disorders Miami Beach, Florida, December 13-16, 2009.

*Abd-El-Aziz A. S., Youssef A. M., Neeland E., Villanueva, E.B., White, M.S., and Klegeris A.* Neuroprotective and Anti-inflammatory Properties of Novel Pyrazolo[3,4-d]pyrimidines. Presented at 3<sup>rd</sup> Annual Canadian Neuroscience Association Meeting, Vancouver, British Columbia, Canada, May 24-27, 2009

*Abd-El-Aziz A. S., Youssef A. M., Neeland E. and Klegeris A.* Synthesis and Biological Evaluation of Novel Pyrazole and Pyrazolo[3,4-d]pyrimidines as Anti-inflammatory Agents. Presented at Ehrlich II, 2<sup>nd</sup> World Conference on Magic Bullets, Nurnberg, Germany, October 3-5, 2008.

Saudi, M. N. S., *Youssef, A. M.*, Badr, M. H., Elbayaa, R., El-azzouni, M. Z., Massallam, S. F., Baddour, N. M. and Eissa, M. M. Synthesis of Substituted Pyrimidinedione Derivatives as Potential Schistosomicidal Agents. Presented at 2<sup>nd</sup> EuCheMs Chemistry Congress Chemistry: The Global Science, Torino, Italy, September 16-20, 2008.

*Youssef, A. M.*, Badr, M. H. and Elbayaa, R. Y. Synthesis and Antitumor Activity of 2-Substituted Benzimidazoles. Presented at the 68<sup>th</sup> International Congress of FIP, Basel, Switzerland, August 29-4 September, 2008.

Rida, S. M., *Youssef, A. M.* and Badr, M. H. Synthesis and Evaluation of Novel 1,3,4-Trisubstituted Pyrazole Derivatives as Antiangiogenic Agents. Presented at the 6<sup>th</sup> Pharmaceutical Sciences Conference, Assiut, Egypt, March 12&13, 2008.

*Youssef, A. M.* and Saudi, M. N. S. Synthesis and Biological Evaluation of Some Monopyrazolyl and Dihydrobipyrazolyl Derivatives as Anti-inflammatory-Antimicrobial Agents. Presented at the 10<sup>th</sup> Ibn Sina International Conference on Pure and Applied Heterocyclic Chemistry, Luxor, Egypt, February 17-20, 2007.

Omar, A.-M. M. E., Ahmed, I. C., El-Sayed, O. A., *Youssef, A. M.*, Hassan, D. A. and El-Ashmawy, I. Synthesis and Evaluation of New Benzothiazole and Benzothiazole-2-Carbamate Derivatives As Potential Anthelmintic Agents. Presented at the 30<sup>th</sup> International Conference of Pharmaceutical Sciences, Cairo, Egypt, December 19-21, 2006.

*Youssef, A. M.* Synthesis of Some Novel Benzothiazole Derivatives of Potential Therapeutic Interest. Presented at Al-Azhar 4<sup>th</sup> International Conference for Pharmaceutical and Biological Sciences, Cairo, Egypt, February 13-15, 2006.

Rida, S. M., Saudi, M. N. S. and *Youssef, A. M.* Synthesis and Biological Evaluation of Some Pyrazole Derivatives. Presented at Al-Azhar 4<sup>th</sup> International Conference for Pharmaceutical and Biological Sciences, Cairo, Egypt, February 13-15, 2006.

*Youssef, A. M.* Czezowski, C. Mohamed, H. M. Ata, A. and Abd-El-Aziz, A. S. Coumarins and Pyrimidines incorporating Benzo[d]thiazole. Presented at the 88<sup>th</sup> Canadian Chemistry Conference Abstracts, Saskatoon, Saskatchewan, Canada, 28 May-1 June, 2005.

*Youssef, A. M.* and Saudi, M. N. S. Synthesis and Biological Evaluation of Some Tacrine Analogues. Novel Acetylcholinesterase Inhibitors for the Treatment of Alzheimer's Disease. Presented at the 9<sup>th</sup> Ibn Sina International Conference on Pure and Applied Heterocyclic Chemistry, Sharm El-Sheikh, Egypt, December 11-14, 2004.

*Youssef, A. M.*, Safo, M. K., Danso-Danquah, R., Joshi, G. S. and Abraham, D. J. Synthesis and X-ray Studies of Chiral Allosteric Modifiers of Hemoglobin. Presented

at the 3<sup>rd</sup> Annual School of Pharmacy Research Day, Virginia Commonwealth University, Richmond, Virginia, USA, 2000.

*Youssef, A. M., Safo, M. K., Danso-Danquah, R., Joshi, G. S., Kister, J., Marden, M. and Abraham, D. J.* Synthesis and Computer-Aided Drug Design of Chiral Allosteric Modifiers of Hemoglobin. Presented at the 17<sup>th</sup> Annual Symposium for Daniel T. Watts and Forbes, Medical College of Virginia, Richmond, Virginia, USA, October 12-13, 2000.

*Youssef, A. M., Safo, M. K. and Abraham, D. J.* Structure/Function of Allosteric Effectors of Hemoglobin. Presented at the 26<sup>th</sup> National Medicinal Chemistry Symposium, Virginia Commonwealth University, Richmond, Virginia, USA, June 14-18, 1998.

*Youssef, A. M., Rida, S. M. Shafik, R. M. and Ashour, F. A.* Synthesis of 2-(pyrimidin-2-yl-amino)-1H-Benzimidazoles and Tricyclic Benzimidazolo Bridge Head Nitrogen Compounds as Potential Antibacterial, Antifungal and Antiviral Agents. Presented at the First International Middle-East Conference in Pharmaceutical Sciences, Jordan University of Sciences and Technology, Irbid-Jordan, May 3-5, 1993.

*Youssef, A. M., Rida, S. M. Shafik, R. M. and Ashour, F. A.* Synthesis of Phenylaminomethyl Benzimidazole Derivatives as Potential Antibacterial, Antineoplastic, and Antiviral Agents. Presented at the First International Middle-East Conference in Pharmaceutical Sciences, Jordan University of Sciences and Technology, Irbid-Jordan, May 3-5, 1993.